**TASK 11 Marking Key**

1. Create a sketch of the crime scene; remember to include all the details that are required on such a sketch. ***(5 marks)***

1 mark each for:

* Location of objects and evidence accurate
* Measurements (not to scale)
* Outline of area with doors
* Legend (location, date, victim)
* Neat

1. On entering the crime scene, make notes **on your sketch** of any information you think may be relevant to the investigation. ***(2 marks)***

2- mentions all evidence (hair, white powder, blood, footprints, blood splatter, murder weapon, fingerprints)

1- mentions some evidence

1. Collect evidence from the scene and preserve it for later analysis. Each group will be allocated evidence to collect: ***(4 marks)***

*1 mark each for doing all:*

* *safely conducts evidence collection (wears equipment)*
* *Labels evidence accurately*
* *Stores data appropriately*
* *Collects evidence using the correct method (dusting, plaster of paris, using tweezers, etc depending on evidence)*

4) Your task now is to write an explanation of what you think could have occurred, citing the evidence that is leading to your initial suspicions. ***(4 marks)***

*1 mark each for:*

* *Logical argument (1)*
* *Mentions 3 examples of evidence in story (1 mark for each)*

**5)** There are a number of suspects that were seen near Student Services around the time of the murder. You must collect samples from these suspects and preserve it for later analysis. Comparing their samples to the evidence found at the crime scene may be able to link one of the suspects well enough for a conviction. Each group will be allocated a suspect to collect evidence from: ***(1 mark)***

*1 mark for all:*

* *Using the appropriate collection method*
* *Correct Storage*
* *labelling*

**Part B – Analysis of evidence**

**STATION ONE – IMPRINT ANALYSIS (FINGER, LIP & SHOE) *(4 marks)***

|  |  |
| --- | --- |
| **Fingerprint** | **Shoe Print** |
| 1 – correctly identifies some patterns  2 – correctly identifies all loops, whorls and arches | 1 – general description of shoe shape  1 – mentions tread/wear patterns |

**STATION TWO – WHITE POWDER ANALYSIS *(5 marks)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Vinegar** | **Iodine** | **Water** | **Ethanol** | **Universal Indicator** |
| 1 – describes all reactions correctly | 1 – describes all colour changes correctly | 1 – describes all reactions correctly | 1 – describes all reactions correctly | 1 – describes all colour changes correctly |
|
|

**STATION THREE – HANDWRITING & FIBRE ANALYSIS *(4 marks)***

|  |  |
| --- | --- |
| **Handwriting Analysis** | **Hair Fibre Analysis** |
| 1 – Mentions slant/fluency  1 – Mentions letter formation | 1 – colour  1 – length |
|
|
|

**STATION FOUR – ANALYSIS OF BLOOD *(8 marks)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Anti-A** | **Anti-B** | **Anti-Rh** | **Blood Type** |
| **Crime Scene Sample – rag** | 1 – no coagulation | 1 – no coagulation | 1 – no coagulation | O- |
| **Crime Scene Sample – pool of blood** | 1 - coagulates | 1 – no coagulation | 1 - coagulated | A+ |

**Part C – Report**

From the table of results, which suspect, if any, is likely to be the killer? ***(1 mark)***

Explain which piece of evidence is the most useful in this case to identify the killer. ***(3 marks)***

1 – appropriate piece of evidence (fingerprint, hair fibre, blood type)

1 - Brief explanation of reason

1 – Thorough explanation of reason

\*\*give marks for justification even if evidence is inaccurate (if it is detailed enough)

Describe how your evidence supports your recommendation for the killer. ***(3 marks)***

1 – at least two pieces of evidence discussed, or

2 – at least 3 pieces of evidence discussed

1 – statement to explain why evidence supports recommendation

Discuss any evidence that does not support your conclusion. ***(2 marks)*** 1 - Piece of evidence (handwriting, blood group [since most suspects had same type] or another if lab goes wrong [Kiara’s class had poor fingerprints)

1 – statement about why this does not support the recommendation

State one form of additional analysis that could be performed on this evidence to strengthen your case and explain how it would help to convict the killer. ***(3 marks)***

1 – Type of evidence (DNA analysis, CCTV, etc.)

1 – What it would help to prove

1 – Why it would support the case

Justify whether this is enough evidence to convict the suspected killer. ***(2 marks)***

1 – states whether it is or isn’t

1 – justifies their decision (either a sentence that says some variation of ‘there is a significant amount of evidence that all points to Nikki’, or ‘the types of evidence we collected are unreliable and a more thorough investigation would be needed’).

You did not take any eyewitness testimonies during your collection of evidence. Eyewitness testimonies are sometimes not very useful when trying to identify a criminal. Describe why a single eyewitness testimony is generally not used when trying to convict a criminal. ***(3 marks)***

1 - eye witnesses can lie

1 – eye witnesses can recall fake information

1 – one person’s account is not reliable, need more

**The end.**